CTR-1474

Four Channel JPEG2000 Compressor with 8 physical inputs

Features

General Features:

Architecture
- PC/104-Plus compliant

JPEG2000 Compression/Decompression
- Patented SURF™ (Spatial Ultra-efficient Recursive Filtering) technology
- Supports both 9/7 and 5/3 wavelet transforms with up to 6 levels of transformation
- Programmable tile/image size
- Video interface directly supporting any video format with a max. input rate of 65 Mcomponents/sec for irreversible mode or 36 Mcomponents/sec for reversible mode
- Interlace temporally coherent frame based SD video sources for improved performance

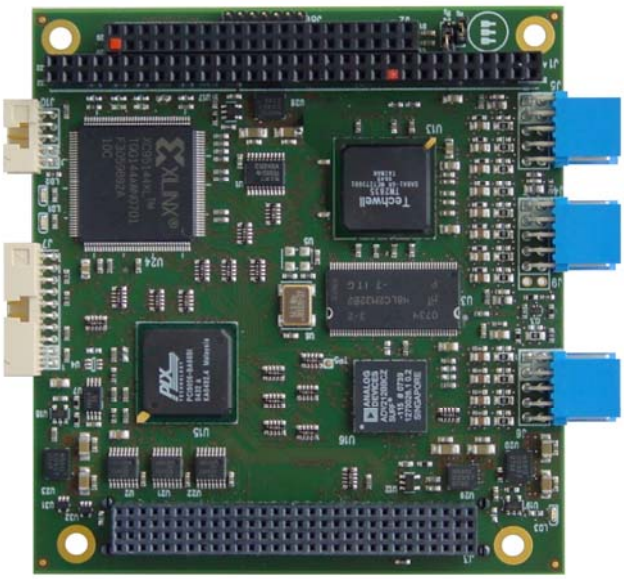
Video Input Channels
- 4 MUX channels, each with 2 Analog Inputs
- 4-Channel simultaneous sampling (1 Analog Input from each MUX)

Four Video Decoders
- Accepts NTSC(M/N/4.43) and PAL(B/D/G/H/I/K/L/M/N/60) standards with auto detection
- Integrated four video analog anti-aliasing filters and 10 bit CMOS ADCs
- High performance adaptive 4H comb filters for NTSC and PAL standards
- IF compensation filter for improved color demodulation
- Color Transient Improvement (CTI)
- Automatic white peak control
- Programmable hue, saturation, contrast, brightness and sharpness
- High performance horizontal and vertical scalar for each path
- Fast video locking system for non real-time applications
- Four built-in motion detectors with 16X12 cells and blind and night detectors

Video Controller
- Supports adaptive median filter for Recording
- Horizontal/Vertical mirroring for each channel
- Last image captured when video-loss detected
- Channel skip in auto sequence switch for record path when video-loss detected
- Image enhancement for zoomed or still image in display path
- High performance 2X zoom to horizontal and vertical direction for display path

RoHS:

- Fully RoHS (2002/95/CE) Compliant.



The CTR-1474 is a high performance four channel Video Compressor that accepts all NTSC/PAL standards with auto detection, and benefits by the features and the enhanced quality provided by the JPEG2000 (J2K) image compression standard.

The Module implements the computationally intensive operations of the JPEG2000 image compression standard as well as providing fully compliant code stream generation for most applications that supports real-time video encoding.

The CTR-1474 provides high quality solutions for use in professional video and Embedded PC systems based on PC/104-Plus modules.

The CTR-1474 can process images at 40M samples/sec in reversible mode, and at higher rates when used in irreversible mode. It contains a dedicated wavelet transform engine, an on board memory system and an embedded RISC processor, which can provide a complete JPEG2000 compression/decompression solution.

CTR-1474

Applications

- Networked video and image distribution systems
- Wireless video and image distribution
- Image archival/retrieval
- Digital CCTV and surveillance systems
- Digital Cinema Systems
- Professional Video editing and recording
- Digital Still Cameras
- Digital Camcorders

About Eurotech

EuroTech delivers embedded computer systems for high capability and low power applications, networking and wearable computing solutions, and application framework middleware for multimedia, industrial, transportation, medical, and wireless applications. EuroTech platforms allow OEM and enterprise customers to focus on their core revenue-generating products and services and get to market quickly.

Physical Characteristics

DIMENSIONS	90 x 96 mm (3.6" x 3.8")
HEIGHT	15 mm (0.6")
POWER SUPPLY	Single +5V DC +/- 5%
POWER CONSUMPTION	2 W (typical)
	3 W (maximum)
OPERATING TEMPERATURE	0 ~ +60°C standard

Options

- Conformal Coating
- Custom Connectors
- Extended Operating Temperature Range

ETH_CTR-1474_DS161008

Americas

EUROTECH Inc
e-mail: sales-us@eurotech.com
tel: +1 301.490.4007
toll free: +1 888.941.2224

Western Europe

EUROTECH UK
e-mail: sales-uk@eurotech.com
tel: +44 (0) 1223 403.410

EUROTECH France
e-mail: sales-fr@eurotech.com
tel: +33 04.72.89.00.90

Central & Southern Europe

EUROTECH Italy
e-mail: sales-it@eurotech.com
tel: +39 0433.485.411

Northern & Eastern Europe

EUROTECH Finland
e-mail: sales-fi@eurotech.com
tel: +358 9.477.888.0

www.eurotech.com